

CHAPTER III. RESEARCH METHODOLOGY

A. OVERVIEW

Because comprehensive information addressing issues of interest to the evaluation is difficult to obtain from a single source, the general approach of the evaluation can be described as one of “triangulation”; that is, arriving at an understanding of the Basic Pilot’s impacts by examining data obtained from various sources, including data from the three principal parties involved – employers, employees, and Federal agencies. Each of these groups has somewhat different information and a different perspective on the pilots. Therefore, the evaluation team obtained information from all three of these groups and conducted a series of analyses to address the evaluation objectives. In addition, a number of secondary data sources were consulted. Chapter III provides a brief description of the research methodology used in these assessments, focusing primarily on five major data collection efforts:

- A mail survey of employers participating in the Basic Pilot and a sample of similar non-pilot employers
- On-site interviews, observation, and review of I-9 forms from a sample of pilot and non-pilot employers
- In-person interviews with employees verified by Basic Pilot employers
- Less-structured interviews with Federal officials associated with the Basic Pilot
- Analyses of the Basic Pilot transaction database of verification queries

B. EMPLOYER STUDIES

1. MAIL SURVEY

a. TARGET POPULATION AND SAMPLING FRAME

The fieldwork for the employer mail survey was conducted from March to July 2000. The target population for the mail survey consisted of two groups:

- All establishments that had signed a Memorandum of Understanding (MOU) to implement the Basic Pilot program as of July 31, 1999
- Non-pilot establishments similar to those pilot establishment that had actually used the system

The sampling frame for the pilot establishments was constructed from INS and SSA databases containing information on establishments that had signed MOUs. The sampling frame for the non-pilot establishments was the GENESYS establishment database maintained by Marketing Systems Group, a commercial database containing data for businesses in the United States.

b. SAMPLING METHODOLOGY

All 1,189 pilot establishments on the sampling frame were included in the mail survey (Exhibit III-1). The 723 establishments that had at least one transaction in the Basic Pilot transaction database were identified from this list. For each of these pilot establishments, the GENESYS database was used to select a non-pilot establishment similar in size, industry, and county. These establishments constituted the initial non-pilot sample. When possible, a second establishment was found that also closely matched the pilot employer in size, industry, and county. If the first non-pilot establishment proved to be ineligible for the survey, the second matched non-pilot establishment was substituted for the original.³⁴

Exhibit III-1: Summary of Sampling and Completion Statistics for Pilot and Non-pilot Establishments

Number of Establishments	Pilot	Non-pilot	Total
Establishments selected for mail survey	1,189	714	1,903
Completed mail survey	637	235	872
<i>Mail survey response rate</i>	67%	44%	59%
Selected for on-site survey	352	200	552
Completed on-site survey	317	93	410
<i>On-site survey response rate</i>	90%	47%	74%
Provided sample employment application forms	264	58	322
Provided I-9 forms at on-site visit	253	30	283

c. QUESTIONNAIRE DEVELOPMENT

Development process. The evaluation team developed questions to measure the highest priority issues³⁵ that employers could address through a written questionnaire. Before sending the survey to the employer sample, human resources professionals at a few establishments were asked to complete the questionnaire in a pretest and to discuss their reactions with senior evaluation staff members. The information was used to further refine the questionnaire. As a result, several questions were reworded to reduce confusion, and items that appeared to be sensitive were moved from the mail survey to

³⁴ Establishments were considered ineligible if they (1) were no longer in existence, (2) were a pilot establishment, (3) were a duplicate of a previously selected non-pilot establishment, or (4) no longer met the matching criteria (e.g., were no longer in the same county as the pilot establishment).

³⁵ See Appendix C for a list of research issues identified and an explanation of how the issues were prioritized.

the on-site survey.³⁶ The questionnaire received clearance from the Office of Management and Budget (OMB).

Questionnaire issues. The employers surveyed were familiar with the topics covered in the mail survey, such as the Form I-9 verification procedures, and pilot employers were familiar with Basic Pilot terminology, such as “tentative nonconfirmation” and “verification of work authorization.” Although the data from the mail survey can generally be viewed as reliable, there are some limitations. Most importantly, some of the estimates requested may have required more effort than respondents were willing to expend for the evaluation or were best guesses. Moreover, some employers may not have been forthcoming with answers to more sensitive or potentially self-incriminating questions.

d. DATA COLLECTION METHODOLOGY

The employer mail survey was implemented from February to April 1999. The evaluation team attempted to contact all targeted employers by telephone to determine the appropriate contact persons, confirm addresses for the mail survey, and determine whether the establishment was currently using the pilot system. Advance letters were sent to all identified employer contacts. For pilot establishments, INS sent pre-notice letters reminding employers that by signing the MOU to participate in the pilot they had agreed to cooperate with the evaluation and encouraging them to do so. For non-pilot establishments, Temple University’s Vice Provost for Research signed the letter emphasizing the importance of the study to future national policy on employment verification.

Approximately a week after the advance letters were mailed, a questionnaire packet was sent to all establishments except those deemed ineligible for the study³⁷ (e.g., no longer in business) or those that had adamantly refused to participate during the telephone contact. In the first round of mailings, 1,701 questionnaire packets were sent to eligible respondents. Three different packet types were mailed.³⁸

- An “active” pilot packet was sent to establishments that claimed during telephone contact that they were using the Basic Pilot system and/or had used the system by July 1999. This packet was also used for establishments that could not be contacted by telephone regardless of whether they were using the system in July 1999. The “active” questionnaire offered this latter group of respondents an opportunity to identify themselves as non-users and to answer the same sequence of questions answered by establishments known to be inactive.

³⁶ The evaluation team was concerned that including sensitive questions on the mail survey would result in employers refusing to complete the questionnaire and avoiding the on-site visit. Deferring sensitive questions to the on-site visit meant that an interviewer would be present to allay any concerns on the part of the respondent.

³⁷ Ninety-one pilot employers were not eligible at the time of the mailing.

³⁸ See Appendix D for copies of the questionnaires.

- An “inactive pilot” packet was sent to those establishments that had no transactions registered on the database at the time of sample selection in July 1999 and had confirmed during the telephone contact that they were not using the pilot system. The INS cover letter stressed the importance of understanding why some establishments were not using the system. The questionnaire itself was much shorter than that used for active establishments, since it did not include question sequences related to pilot use.
- All non-pilot establishments received a non-pilot cover letter from Temple University and a questionnaire, along with a \$5 token incentive.³⁹

To ensure that establishments responded, the evaluation team took the following actions:

- A “thank you/reminder” letter was mailed approximately 10 days after the full questionnaire mailing.
- The on-site interviewers reminded establishments to complete the mail survey if they had not already done so.
- Nonrespondents to the mail survey who were not in the on-site sample were reminded by telephone, and, if that was not successful, they were sent a final request to participate by UPS Next Day Air.

e. RESPONSE RATE

The overall response rate for the mail survey was 53 percent.⁴⁰ Six percent of eligible respondents refused to complete the questionnaire, and the remaining nonrespondents failed to return their questionnaires – following three remailings and two reminder calls. The response rate was 67 percent for pilot establishments and 43 percent for non-pilot establishments.

Dillman reported that mail surveys can obtain a response rate of 58 to 92 percent, with an average response rate of 74 percent.⁴¹ Dillman still believes that response rates like these can be achieved, but that added measures such as incentives and multiple contacts must be used. The evaluation team followed Dillman’s Tailored Design Method, but response rates for the evaluation were not that high. However, it is anticipated that valuable insights can nevertheless be derived from the data.

³⁹ There is extensive literature indicating that such incentives are helpful in encouraging participation in surveys of the general population, while there is less evidence of their effectiveness in establishment surveys. What little evidence exists supports the effectiveness of incentives in these surveys as well.

⁴⁰ Response rates are calculated by dividing the number of completed surveys by the number of surveys sent to in-scope establishments. The number of in-scope establishments excludes establishments that are no longer in business.

⁴¹ Dillman, 2000.

f. WEIGHTING

Weighting was used to adjust statistically for the fact that responding establishments did not always closely resemble nonresponding establishments in terms of size. Statistics presented in this report are based on the weighted values unless otherwise noted.

Additional details on weighting and estimation are provided in Appendix E. Although the weights used to produce the survey estimates were adjusted for nonresponse, some bias in the estimates may result because respondents differ from nonrespondents in ways that are relevant to the interpretation of the survey results.

2. ON-SITE SURVEY

a. TARGET POPULATION AND SAMPLING METHODOLOGY

The Basic Pilot on-site employer sample consisted of 352 establishments located in California, Florida, Illinois, New York, and Texas that had 10 or more transactions on the Basic Pilot transaction database as of December 31, 1999. The evaluation team then selected a random sample of 200 matched non-pilot establishments. Meatpackers in Nebraska were not represented in the site visits.

b. PROTOCOL DEVELOPMENT

After the on-site questionnaire was developed, human resources employees at a few establishments were asked to respond and to discuss their reactions with senior evaluation staff. This information was used to refine the survey instrument. As a result, several questions were reworded for clarity or to reduce respondent anxiety.

c. DATA COLLECTION METHODOLOGY

Establishments selected for on-site visits were initially contacted about the visit by mail. Letters introducing the visit, printed on the study letterhead, informed the establishments that they had been selected to participate in the second phase of the Study of Employment Eligibility. After the introductory letters were due to arrive at the eligible establishments, a site coordinator called to schedule appointments for the visits.

For pilot establishments, the on-site visits were conducted from April to July 1999 and consisted of three components:

- A structured interview with the director of human resources, or other similarly positioned employee, pre-arranged by appointment
- An observational component that required the interviewer to observe the pilot system software in use, posted Equal Employment Opportunity (EEO) notices, and posted notices of the establishment's participation in the Basic Pilot program
- A records review component that required the interviewer to select a random sample of I-9 forms from all I-9 forms completed between July 1 and December 31, 1999, and copies of application forms used by the employer

The on-site visits to non-pilot establishments were similar, except that during the observational component only the posting of EEO notices was recorded.

The in-person interviews and the on-site observation provide robust sources of data on employer performance in employment verification and pilot procedures. However, although interviewers were trained and provided written guidelines, the semi-structured nature of the interview may have introduced some bias because of differences in the way that interviewers asked the questions and conducted the observation.

d. INTERVIEWER SELECTION, TRAINING, AND MONITORING

The evaluation team used 41 interviewers from the sampled regions, including staff interviewers and individuals recruited through newspaper advertisements. One interviewer was recruited for every 10 employers sampled. Most were experienced interviewers. In addition, four interviewers from non-pilot States, who travel for the Institute for Survey Research, also attended training. Thirty-nine interviewers successfully completed the 2-day training session and successfully underwent Federal security clearance.

On the first day of training, the study directors presented an overview of the INS Study of Employment Eligibility, its background, and its purpose. The senior field coordinator presented the contact procedures, reviewed additional study materials, and provided general recording instructions. The administration of the pilot and non-pilot questionnaires was demonstrated, and the interviewers conducted mock interviews for each instrument. Instruction related to the observation and Form I-9 document retrieval phases of the on-site visit was also provided.

On the second day, interviewers were instructed on how to make initial contact with respondents and how to gain meeting time with human resources managers, whose schedules are often constrained. This was followed by a brief review of the goals of the project and a review of questions respondents were likely to ask. Most of the second day was spent training interviewers to perform a sampling procedure on Form I-9 records. Small-group mock interviews allowed a final opportunity for interviewers to ask questions about the instruments. The training concluded with a review of administrative procedures (i.e., weekly reporting to the coordinator, sending in completed work, payroll procedures).

For the interviews, the site coordinator supervised and monitored the interviewers, made the initial telephone contact with the respondents, and was available for employers to call with questions during business hours. As a way of validating the on-site surveys, comment forms were sent with the thank you letters. Thirty-six percent (n=148) of the completed cases returned a comment form.

e. FORM I-9 SAMPLING

To assess the extent to which the Basic Pilot system is used to verify some but not all newly hired employees, up to 20 I-9 forms were selected from each employer's records during the site visits. The information on the sample I-9 forms was compared to the

verification information on the Basic Pilot transaction database to identify employees who were hired but not verified.

The selection of I-9 forms was carried out by the on-site interviewer following multi-stage sampling procedures. If the number of new hires in the study period was less than 20, the protocol instructed the interviewer to take all of the I-9 forms. If more than 20 employees had been hired, file drawers were first sampled and then I-9 forms were randomly selected within each file drawer. The selection of file drawers and individual I-9 forms followed sampling tables included in the protocol.

f. RESPONSE RATE

Researchers were able to conduct site visits at 317 of the 352 Basic Pilot establishments (90 percent response rate) and 93 of the 200 non-pilot establishments (47 percent response rate). Approximately 20 percent of the pilot establishments and two-thirds of the non-pilot establishments visited did not provide I-9 forms.

g. WEIGHTING

Weighting was used to adjust statistically for the fact that responding establishments did not always closely resemble nonresponding establishments in terms of size. Statistics presented in this report are based on the weighted values, unless otherwise noted.⁴² Additional details on weighting and estimation are provided in Appendix E.

C. EMPLOYEE IN-PERSON INTERVIEWS

1. EMPLOYEE POPULATION AND SAMPLING FRAME

The employee study targeted current and former employees hired by the 352 sampled pilot establishments during the last 6 months of 1999. These employees represented several groups of interest to the evaluation: (1) employees who were authorized in the initial SSA verification or in the INS primary or secondary verification stage; (2) employees who failed SSA confirmation or INS secondary verification, but were eventually verified as work-authorized after contacting the appropriate agency; (3) employees who failed secondary verification and received a final nonconfirmation; and (4) employees who were hired but not verified.

The first three groups of employees were identified and sampled from the Basic Pilot transaction database. The fourth group of employees could only be identified by selecting a sample of I-9 forms at the establishment and then determining that the employee had not been verified. The determination was made by checking whether the employee's verification record was in the Basic Pilot transaction database. The Basic

⁴² The weights for the on-site sample differed from those for the mail sample because of the subsampling performed in selecting the on-site sample.

Pilot transaction database, created for the purposes of this study, contains a complete record of all employment verification queries processed for Basic Pilot employers.

For the three groups in the employee study sampled from the Basic Pilot transaction database, the sampling unit was defined as a verification transaction for a Social Security number by a specific pilot establishment. The transaction database indicates the results of each verification query. The sample was drawn from all verifications conducted between July 1, 1999, and December 31, 1999. For sampling purposes, every eligible pilot employee on the sampling frame was assigned to one of eight categories (or strata) defined by different combinations of the following:

- The agency making the work-authorization decision: SSA or INS
- The outcome of the verification: authorized on first try, authorized after tentative nonconfirmation, unauthorized, or verification outcome not resolved

2. SAMPLING METHODOLOGY

Overview of methodology. The evaluation team expected that work-related employee experiences would be influenced by the results of the verification outcomes. To ensure that adequate information on each of the groups would be obtained, independent samples – as specified in the last column of Exhibit III-2 – were drawn from each group. In general, strata with few cases were sampled at a higher rate than strata with large numbers of cases. Employees whose work authorization was not ultimately established were of special interest because they were believed to be likely to report discrimination, privacy violations, or dissatisfaction with the pilot verification system. As a result, this group was heavily oversampled.

Small subgroup sample sizes. Subgroup estimates based on small samples are of relatively lower precision and yield lower statistical power than those based on larger samples. For example, sample sizes for employees with work-authorization problems (n=101) and those who contacted SSA or INS to resolve work-authorization problems (n=67) are based on small samples and must therefore be interpreted with caution.

Exhibit III-2: Employee Sample Sizes and Sampling Percentage, by Verification Outcome and Agency

Sampling Stratum	Approximate Population Size	Sampling Percentage	Sample Size
SSA			
Initially authorized by SSA	40,026	2.0	800
Eventually authorized by SSA	11,929	6.7	800
Self-terminated or quit – SSA	4,448	7.9	350
Unconfirmed – SSA	2,448	14.3	350
INS			
Initially authorized by INS	5,362	11.2	600
Authorized by INS – 2nd stage	2,655	28.7	763
Eventually authorized by INS – 3rd stage	142	100	142
Self-terminated or quit – INS	348	100	348
Unauthorized by INS	114	100	114
Inconsistent authorization results	443	100	443
Total	67,915	6.9	4,710

3. QUESTIONNAIRE DEVELOPMENT

Development process and questionnaire timing. Questions measured the highest priority evaluation issues among those for which employees were likely to have information. After the questionnaire had been developed, senior evaluation staff members pretested it with a small number of employees. This information was used to reword several questions, improving respondent understanding and reducing respondent anxiety and burden. The final questionnaire was also translated into Spanish to accommodate the high proportion of Hispanic employees in the sample. The questionnaire received clearance from OMB.

As shown in Appendix F, the employee questionnaire was relatively short, taking approximately 20 minutes, even when the maximum number of questions was applicable. Most respondents (more than 95 percent) did not need to contact SSA or INS, and therefore were not asked questions that dealt with the resolution of work-authorization problems with the Federal agencies. Those respondents who resolved work-authorization problems and needed to contact SSA or INS were administered the full-length interview.

Questionnaire issues. A potential limitation of the findings from the employee interviews is that the survey questions often reference terminology, concepts, and printed materials that may have been unclear to anyone not familiar with the Basic Pilot program. The evaluation team made every effort to design a clearly worded questionnaire, including the use of visual aids such as the I-9 form. The interviewers made every effort to administer the questionnaire carefully and record employee comments accurately, so that researchers could have valid data that represent the employees' intent. However, some questions were particularly difficult to understand and answer, and they did not

always yield valid responses; in some cases, the employee did not remember the referenced event. Where relevant, this report identifies patterns of responses that may indicate possible misunderstanding of Basic Pilot procedures and concepts.

4. LOCATING AND CONTACTING EMPLOYEES

The employee data collection effort involved two main activities: obtaining addresses for sampled employees and administering the questionnaire in person. One of the most challenging aspects of the employee interviews was locating sampled employees. The evaluation team attempted to obtain employee addresses directly from pilot employers, but few employers were willing to provide contact information because of privacy considerations.⁴³ Since employee address information is not used in the Basic Pilot verification process, and thus is not available on the Basic Pilot transaction database, extensive tracing was necessary to obtain addresses for employees. The four basic components of the evaluation team's tracing strategy were (1) credit bureau checking, (2) postmaster address confirmation requests, (3) telephone and Internet tracing from the contractor's home office, and (4) interviewer field tracing. The credit bureau checking was based exclusively on the information from the Basic Pilot transaction database. The three other components built on the information obtained from credit bureaus.

Originally, the evaluation team had planned to interview non-pilot employees as well as pilot employees. However, access to these employees required that the non-pilot employers cooperate in sampling employees and providing contact information. Efforts to achieve this cooperation were not successful within viable timeframes, because of employer concerns about employee confidentiality; therefore, only employees of Basic Pilot establishments were interviewed.

For the most part, interviews were conducted in the sampled employees' homes. Only in 74 geographically isolated cases were interviews conducted over the telephone. In-person interviewing was chosen because of the complexity of some of the questions, the need to display the I-9 form and other Basic Pilot forms, and the low education level of a significant proportion of sample persons. The data collection followed procedures and management structures designed to ensure the highest quality data.

The first contact with the employee was a mailed introductory letter describing the purpose of the survey, establishing the survey's legitimacy, guaranteeing confidentiality, and identifying persons who could be contacted to respond to questions about the survey. Within 2 weeks of mailing the introductory letters, interviewers began to contact the sampled employees. To facilitate introduction at the door, interviewers wore identification and handed out the study brochure to the person answering the door. To encourage participation, respondents who completed the interview were offered a \$10 incentive.

⁴³ Employers were under no obligation in the MOU to provide this information. Time also constrained the tracing efforts.

5. INTERVIEWER SELECTION, TRAINING, AND MONITORING

Interviewer recruitment, training, and supervision followed established procedures designed to achieve the highest quality results. In hiring interviewers for the employee study, special attention was given to interviewing experience, residence in the study areas, and Spanish language ability. In addition, all interviewers had to successfully undergo a Federal security clearance.

Forty interviewers were trained in 3-day training sessions conducted in Washington, DC, and Los Angeles. Before training, interviewers received a home-study package that provided background on the study. On the first day of training, the study director described the Form I-9 verification process and the Basic Pilot program, and the field manager discussed recording procedures as well as strategies for contacting respondents and maximizing cooperation. The second day focused on a review of question-by-question specifications and practice interviews in an interactive lecture setting. The third day was devoted to role-plays using scripted questionnaires and individual feedback by project staff. To be qualified to work on the study, interviewers were required to successfully complete a series of “certification” interviews observed by training staff.

The employee interviews were conducted from April to July 2000. During the data collection period, interviewers were monitored in several ways. First, they had weekly conference calls with their supervisors to discuss productivity, tracing problems, and contact strategies for maximizing response rates. Supervisors thoroughly reviewed the first 10 to 15 cases for each interviewer and provided feedback. Additionally, 7 percent of all completed cases were recontacted by a quality control interviewer for validation.

6. RESPONSE RATES

The evaluation team selected 4,710 Social Security numbers (see Exhibit III-2) from the transaction database to serve as the basis for the employee sample. The high mobility of the study population made the tracing operation more difficult. For various reasons, 49 percent of sampled Social Security numbers were not considered eligible for assignment to a field interviewer, primarily because an address could not be found (32 percent) or the employee lived outside the interviewing area within the original Basic Pilot States (14 percent).

After extensive tracing, 2,334 employees were assigned to field interviewers. Of those, 44 percent (1,016) completed an interview. Most of the remaining employees were not interviewed because they could not be located even after extensive field tracing. Among those contacted, there was very high cooperation with the study; approximately 95 percent completed the interview. Forty-six completed interviews were declared ineligible after consistency edit checks identified that the employee’s hire date was before the employer signed up for the Basic Pilot. After removing these 46 interviews from the analysis database, 970 useable interviews remained.

7. WEIGHTING

Overview of weighting. All survey estimates of the employee population are weighted estimates unless otherwise noted. The weights reflect the probability of selection within each of the 10 sampling strata. As anticipated, the results of tracing, locating, and interviewing the original sample of 4,710 employees differed by sampling stratum. To reflect these differences, the sampling weights were adjusted. The adjusted weights were used to inflate sample data, used in computing means and percentages, to the population represented by the sample, namely, employees verified by pilot establishments in the study reference period. Additional details on weighting and estimation are provided in Appendix E.

Small subgroup sample sizes. Subgroup estimates based on small samples are of relatively lower precision and yield lower statistical power than those based on larger samples. As shown in Exhibit TWO-1 (page 78), weighted estimates for employees with work-authorization problems (n=101) and the experiences of those who contacted SSA or INS to resolve work-authorization problems (n=67) are based on small samples and must therefore be interpreted with caution.

Thus, some bias may have resulted because employees who were found and agreed to be interviewed may differ, in ways that are relevant to the interpretation of the evaluation findings, from those who could not be located or who refused. To account for this possible source of bias, the evaluation team reviewed the tracing and nonresponse results and adjusted the sampling weights used in the estimated percentages, following standard procedures.

D. INTERVIEWS WITH FEDERAL OFFICIALS

1. TARGET POPULATION AND SAMPLING FRAME

The evaluation team identified senior officials from SSA, INS, and other offices within the Department of Justice who had current or previous responsibility for designing and/or implementing the pilot programs.

Most of the individuals identified were career officials, although a few were political appointees. Some of the identified officials devote a majority of their workday to pilot-related activities, while others were involved in the original design or are associated with the pilots in a supervisory or advisory role. Senior staff of Lockheed-Martin, which provides contract support in the design and management of the pilot computer systems, were also interviewed to help the evaluation team understand the design of the databases behind the pilot systems.

2. DEVELOPMENT OF THE INTERVIEW GUIDE

Using the compiled list of research issues, the evaluation team developed an interview guide to use in the Federal interviews. The main topics covered were the interviewees' perspectives on the following issues:

- Design of the employment verification pilots, in particular the Basic Pilot program
- INS and SSA databases used in pilot systems
- Recruitment and training of pilot employers
- Benefits and costs to employers, employees, and the government
- Outcomes of the pilots, including issues related to discrimination, privacy, and security
- Unauthorized workers and their role in the U.S. economy
- Goals of the pilot programs
- The prospect of a larger scale implementation

A protocol was designed to provide general guidance to the senior evaluation staff who conducted the interviews. Since the goal of the interviews was to obtain information from experts in the development and implementation of the Basic Pilot program, rather than to obtain statistically rigorous data, interviewers were allowed reasonable latitude to improvise as needed.

3. DATA COLLECTION METHODOLOGY

Once the list of candidates for these interviews had been finalized, the evaluation team contacted officials to be interviewed and described the purpose of the interview. After officials agreed to an interview time and date, a confirmation letter or e-mail message was sent, which also provided a list of general topics to be covered.

Interviewers used the guide to provide some structure to the interviews but did not strictly follow it. They deleted questions that the interviewee was not likely to be knowledgeable about, added probe questions for areas in which the interviewee had special expertise, and expanded on responses that seemed of interest. This relatively unstructured design, combined with the purposive selection of the interviewees, means that quantitative analyses of the data are not feasible. However, the interviews do provide important background information about the pilot programs, as well as some specific information best known to the key Federal officials closest to the pilots.

4. RESPONSE RATES

All of the officials identified for interviews agreed to participate. Often these respondents invited additional persons to the interview. A total of 20 officials were interviewed in a one-on-one or small-group setting. Interviews typically took 1 to 2 hours, depending on the respondent's degree of involvement with the pilots.

E. INPUT FROM OTHER STAKEHOLDERS

Although formal interviews were not conducted with other stakeholders, such as advocacy groups and immigration researchers, their input was solicited through two formal meetings. In November 1998, the evaluation team convened a 1-day workshop in Washington, DC, to identify and discuss topics for consideration in the evaluation. The primary purpose of the workshop was to give stakeholders and other interested groups an opportunity to contribute to the formulation of the research issues that would guide the evaluation design. Representatives of employer, employee, and community groups likely to be affected by the programs were invited to the workshop, along with representatives from key Federal agencies and congressional committees. The evaluation team used the information from the workshop to further develop research issues and the evaluation design.

F. BASIC PILOT TRANSACTION DATABASE ANALYSIS

INS and SSA designed two transaction databases to capture employee information that employers submitted to the Basic Pilot system. The SSA and/or INS system responses were also captured, along with entries from field staff involved with the case. Evaluation staff merged these database records to provide an analytic database consisting of unique records for each employee/establishment combination. The resulting file was cleaned to eliminate duplicate entries and to resolve discrepancies in establishment names between the INS and SSA databases.⁴⁴ INS and SSA also maintained separate files with information about employers enrolled in the Basic Pilot program. Extracts from these two files were cleaned and matched by employer ID to the transaction database to create the Basic Pilot transaction database. This file was analyzed to summarize the Basic Pilot verification outcomes. The transaction database used in the analysis was a census of approximately 365,000 employee records over a 2-year period, from November 1997 through December 1999. Since this is a census of all Basic Pilot transactions, the analyses based on the transaction database are not subject to sampling error. However, there are non-sampling errors. To construct the transaction database, the evaluation team had to identify duplicate records and match cases in the INS transaction database to the corresponding cases in the SSA database. In some cases, staff members had to make informed determinations of how to treat duplicate or unmatched cases. As in any case involving human judgment, mistakes may occur.

⁴⁴ Unless otherwise specified, the term "Basic Pilot transaction database," as used throughout this report, refers to the "transaction database" produced for purposes of the evaluation.

G. REVIEW OF I-9 FORMS

The evaluation team attempted to collect I-9 forms from all pilot and non-pilot employers that participated in the on-site visits. Up to 20 I-9 forms were selected from each employer's records during the visits. The random sample of I-9 forms from pilot employers was compared with information in the verification databases and used to identify any pilot employees who were hired but never verified through the Basic Pilot. Estimates based on the sample of I-9 forms are not weighted because the storage and record-keeping procedures on-site presented challenges in capturing the information that was necessary to construct weights.

Response rate. Interviewers collected I-9 forms from approximately 80 percent of the participating on-site pilot establishments and one-third of visited non-pilot establishments.

H. OTHER SECONDARY DATA SOURCES

Several databases maintained by Federal agencies or private providers were used to supplement the information available from INS and SSA. GENESYS was used to obtain supplemental information on employer size, industry classification, location, and sales volume for pilot and matched non-pilot establishments. Also obtained from GENESYS was summary information on these variables for the Nation and each of the target States for all establishments included in that database. Other sources of national data were statistics from the Bureau of Labor Statistics and the Small Business Administration, information from INS's *1999 Triennial Comprehensive Report on Immigration*, and statistics maintained by the Census Bureau (including the 1990 Decennial Census, the March 1999 Current Population Survey, *USA Counties 1998*, *State Population Estimates 1990-1995*, and the economic censuses). Since most of these data were taken from large Federal databases such as the Census Bureau's Current Population Survey or Federal reports such as INS's *Statistical Yearbook*, they can be considered reliable.

I. SYSTEM TESTING

The evaluation team tested the Basic Pilot security system by trying to access classified data in spite of system protections. These tests of fraud resistance were performed by research assistants with intermediate knowledge of computer operations. Other security tests consisted of determining whether unauthorized users can operate the Basic Pilot system without knowing the user ID and password combination. Tests for fraud resistance also consisted of trying to manipulate the system to produce false work-authorization documentation.

J. REASON TESTERS WERE NOT USED

The evaluation team also considered the possibility of using "testers" (i.e., individuals working for the evaluation team who apply for jobs). Such an approach would provide additional information on the probable effect of the pilot program on discrimination. However, to provide comprehensive information on discrimination related to the Basic

Pilot program, it would be necessary to have the testers go through the full hiring process and the first 2 or 3 weeks of employment. The team was concerned that using testers in this way would place an unfair burden on employers, who might invest resources in hiring and training the employees. A more limited use of testers would place fewer burdens on employers, but would provide more limited information. Given the sensitivity of such an approach, the evaluation team decided not to use testers.

K. STATISTICAL TECHNIQUES USED IN THIS REPORT

A variety of statistical techniques were used in preparing this report, ranging from simple descriptive statistics to more sophisticated multivariate techniques such as logistic regression. When the evaluation team compared statistics for two or more groups, such as pilot and non-pilot employers, the observed differences were tested for statistical significance at the 0.05 level. Additional information about these techniques is contained in Appendix E.